

**EMPLOYEE TURNOVER IN THE
FEDERAL GOVERNMENT**

The Congress of the United States
Congressional Budget Office





NOTES

Unless otherwise indicated, all years referred to in this report are fiscal years.

Turnover rates throughout the report do not cover the Senior Executive Service.

PREFACE

Employee turnover has important consequences for an organization--among others, cost--and the amount of turnover can serve as an indication to management of the appropriateness of personnel policies. The Office of Personnel Management would like to see federal turnover data used to help evaluate the adequacy of compensation for federal employees.

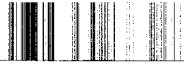
This special study, requested by both the House Budget Committee and its Task Force on Income Security, examines the nature and extent of turnover among federal workers. It also sets out comparisons of federal and private-sector turnover rates and describes issues associated with using turnover rates to evaluate compensation. In keeping with the Congressional Budget Office's (CBO's) mandate to provide objective and nonpartisan analysis, the report makes no recommendations.

R. Mark Musell of CBO's Intergovernmental Relations Division prepared the report under the supervision of Stanley L. Greigg and Earl Armbrust. Gregory Paradiso provided valuable research and data processing support. Many individuals provided advice, information, and comments, and the author would especially like to acknowledge CBO's Robert W. Hartman and Bruce Vavrichek. The author also owes special thanks to Sherry Snyder, who edited the report, and to Mary V. Braxton who typed the many drafts and prepared the report for publication.

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February 1986





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SUMMARY

How extensive is employee turnover in the federal government, and how does it compare with that experienced by other organizations? Managers ask these questions because the rate at which workers leave might tell them something about employee reaction to compensation and other personnel policies. Negative consequences of turnover include the time and money required to recruit and train replacements. On the positive side, turnover can facilitate the introduction of new ways of doing things. The question of turnover in government holds special significance, because the Office of Personnel Management (OPM) has recommended greater use of turnover rates to help evaluate federal pay.

FEDERAL TURNOVER

In the federal government, turnover is more common among white-collar workers than blue-collar workers, among clerical occupations than other major white-collar occupations, and among newer workers than workers with long federal service. In 1984, about 195,000 full-time, nonpostal federal workers with permanent appointments left federal jobs or transferred to other federal agencies--representing a turnover rate of 11.5 percent. (The turnover rate expresses separations as a percentage of average employment over a specified period. Rates may be developed for different types of separations--the quit rate, which measures resignations, being the most often cited.) Most of these workers either quit or retired.

For full-time, federal, white-collar workers with permanent appointments, turnover stood at 12.3 percent in 1984--about three percentage points higher than the rate for the government's blue-collar workers. Among white-collar workers, turnover varies by occupation and length of time on the job (see Summary Table). Based on a review of voluntary separations (covering quits and transfers only), clerical workers show the highest turnover among the government's major white-collar occupational groups--with rates standing at nearly twice that for all groups.



Workers with few years on the job also show high turnover. Those with five years of service or less have a turnover rate more than twice that for all workers and more than 20 times that for workers with more than 25 years on the job. High turnover among new workers may reflect both the search for meaningful work that occurs early in many careers and the young age of many workers with fewer years of service. Young employees tend to enjoy greater mobility, given the generally greater absence of family, retirement, and other responsibilities and concerns.

Analysis by the Congressional Budget Office (CBO) indicates that the government does not lose a disproportionate share of superior performers

SUMMARY TABLE AVERAGE ANNUAL RATES FOR QUILTS AND TRANSFERS FOR THE FULL-TIME, PERMANENT, GENERAL SCHEDULE WORKFORCE, BY OCCUPATION AND YEARS OF SERVICE, 1984

Occupation	Percent of GS Workforce	Years of Service					All Workers
		5 and Under	6-15	16-20	21-25	25 and Over	
Professional	22	11.2	4.7	1.8	1.0	.5	5.1
Administrative	29	8.7	4.9	2.5	1.6	.7	3.8
Technical	22	13.1	5.9	2.5	1.4	.6	5.5
Clerical	24	19.5	10.3	4.4	3.0	1.1	12.4
Other	3	30.1	10.5	5.2	3.3	1.6	15.1
All Occupations	100	15.1	6.6	2.7	1.6	.7	6.8

SOURCE: Congressional Budget Office, from data provided by the Office of Personnel Management.

NOTE: Data cover employees on the General Schedule and schedules equivalent to it (like the Foreign Service and Department of Medicine and Surgery pay plans) in the Executive Branch except for the U.S. Postal Service, the Tennessee Valley Authority, and several other small agencies.

among its managers and supervisors. This indicates a healthy pattern in turnover; given that a certain amount of turnover always occurs, an organization would do better to lose employees whose performance is unsatisfactory and keep those who perform well. The senior managers and supervisors with pay tied to performance covered by the CBO analysis are a small group, however, and problems may exist among other federal employee groups. A study by the Department of Defense, for example, shows that it loses more engineers from among those regarded as superior employees than from among those less highly rated.

COMPARISONS OF TURNOVER RATES

Comparing turnover rates between organizations can help managers determine whether their turnover is too high or too low. OPM would like to see comparisons between federal quit rates and those of the private sector used to help evaluate the adequacy of federal pay. According to OPM's view, relatively low turnover indicates generous pay that keeps workers from leaving at a healthy rate. Relatively high turnover, on the other hand, may signal low pay rates that are not adequate to retain qualified workers.

Various comparisons between federal and private-sector turnover developed by CBO show that federal turnover is relatively low, but the differences are generally much smaller than those found by OPM. Based on 1984 data collected by the Administrative Management Society, for example, CBO estimates annual quit rates of 10.9 percent for white-collar workers in nonmanufacturing firms outside the federal government--6.0 percentage points higher than the comparable federal white-collar quit rate of 4.9.

Several factors may account for this difference. Transfers between firms in the same line of work count as quits in private-sector data. If, in similar fashion, transfers between agencies are counted as quits, the federal rate would jump to 6.8 percent, with the difference between federal and private rates falling to 4.1 percentage points. Counting transfers as quits recognizes that the size and diversity of government permit federal workers to achieve through a transfer the kind of change that private-sector workers can achieve only by quitting.

In addition, federal hiring practices and provisions of the Civil Service Retirement system may help boost the average age of the federal workforce relative to that of the private sector. In fact, assuming that turnover patterns remained the same in government but that the federal workforce was as young as the private sector's, the federal rate for quits and transfers

could increase from 6.8 to 8.8--thereby reducing the private-federal "gap" to about 2 percentage points.

Civil Service Retirement provides generous benefits to those who make a career of public service but offers economic disincentives to those who leave for other work. In the private sector, by contrast, employees under Social Security and some private-sector plans do not incur losses in retirement benefits when changing jobs. One forthcoming analysis, in fact, attributes almost all of the difference between federal and private turnover to the design of the federal retirement system.

USING COMPARISONS IN MANAGEMENT DECISIONMAKING

Although quit rates may provide management with important information for selectively evaluating federal pay and for other purposes, several considerations ought to accompany their use.

Adopting comparisons of federal and private-sector quit rates as an element of pay reform would require the development of new private-sector data. Many firms do not keep the detailed data that a large complex organization like the government would probably require. Collecting and evaluating turnover information would consume federal resources and encounter many of the same design controversies as current surveys of pay comparability.

Although studies disagree on the amount of the relationship between pay and turnover, they generally concur that a variety of organizational, personal, and economic factors influence separation decisions. The influence of any given factor, moreover, will vary with circumstances. If comparisons of quit rates are to serve as a gauge of the adequacy of pay, analysts would have to develop methods for isolating the influence of pay on workers' decisions to stay or leave, from the influence of all other factors that might be taken into account.

Turnover also has costs, such as costs associated with the lower productivity of new workers and for recruiting and training employees to replace those who quit. CBO obtained data from five large federal agencies on recruitment and placement costs for selected positions. Costs range from \$300 per position for secretarial jobs to just over \$22,200 per position for medical officers. Managers might be asked to incur such costs if the personnel actions that give rise to them also produce large savings, but the costs and other problems associated with turnover, such as delays and lower work quality, should not be ignored.

Finally, the effectiveness of quit rates as a workforce management tool will depend, in large part, on how they are used. A rigid system that adjusts pay solely on the basis of the results of quit rate comparisons could hurt the quality of the workforce. Managers who have low turnover but lose many superior performers, for example, might find that their efforts to keep good workers are undermined by pay cuts. Moreover, if retirement and other non-pay-related factors are as influential in determining federal quit rates as some analysts claim, then adjusting pay solely on the basis of quit rates may simply result in successive pay cuts that demoralize the federal workforce, reduce the quality of new workers, and do little to change turnover, at least in the short term.



CHAPTER I

INTRODUCTION

In 1984, about 195,000 federal employees either left federal service altogether or left a position in one federal agency for a position in another. Managers in both government and the private sector generally view such loss of staff--or employee turnover--as a problem, because employees who are leaving may be experienced workers, and additional costs are incurred for recruiting and training replacements. But turnover can also have positive consequences; for example, removing workers whose performance is unsatisfactory, and providing an opportunity to introduce new ideas and innovative procedures into the workplace. Whether a blessing or a curse, employee turnover is a major organizational occurrence with significant consequences, and concern about it remains an important aspect of personnel management.

Current budgetary constraints place a premium on effective management of human resources and have given rise to a variety of proposals for reforming federal personnel practices. A December 1984 report by the Office of Personnel Management (OPM), *Reforming Federal Pay: An Examination of More Realistic Pay Alternatives*, focused considerable attention on the subject of federal turnover by suggesting that the government begin using the rate at which federal employees resign--known as the quit rate--to evaluate the adequacy of federal compensation. According to OPM's original plan, turnover would indicate the adequacy of the pay rates for the government's different occupations and would help determine the level of pay adjustments to be granted. Given recent interest in federal turnover, this paper addresses the following questions:

- o What is the current pattern in federal turnover?
- o How does the federal experience compare with that of other employers, particularly those in the private sector?
- o What issues should be examined when considering the use of quit rates to evaluate federal compensation?

The analyses in this paper reflect current federal turnover experience. The reader should guard against extrapolating findings to the very different future environment that may emerge as a result of budgetary actions under the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177) and forthcoming changes in federal retirement benefits.

TURNOVER IN THE FEDERAL GOVERNMENT

The 195,000 federal workers (full-time with permanent appointments) who left their jobs in 1984 represent 11.5 percent of the average employment for the period, referred to as the separation or turnover rate (see Table 1). Quitting and retiring were the most common reasons for leaving, representing about 60 percent of total separations for all workers. (See accompanying box for a description of the various methods used to measure turnover.)

Separations of all types were higher for the government's white-collar workers (those paid according to the General Schedule (GS) and related pay plans) than for its blue-collar workers (those covered by the Wage System). For 1984, the separation rate for GS workers totaled 12.3 percent, while that for Wage System workers was 8.9 percent.

Several factors may help explain low turnover rates among blue-collar workers. More federal blue-collar workers are employed outside major metropolitan areas, where fewer opportunities may exist for transfer to another federal agency. In addition, most blue-collar workers are men and therefore are less likely to leave work to raise families. According to 1984 OPM data, men make up nearly all of the government's full-time, blue-collar workforce, but only half of its full-time, white-collar workforce.

Over the past decade, the trend in federal turnover appears to be one of gradual increases through 1979, and small decreases thereafter. From 1980 to 1984, turnover, as measured by quit rates, has decreased by about 4 percent, from 4.5 to 4.3.¹ Quit rates were used in this analysis because quits is the largest category of separations and the one for which consistent data over time are most readily available.

1. Although not considered here, the increase in reductions-in-force occurring in 1981 and 1982 contributed surprisingly little to overall turnover, adding at most 0.2 percentage points to the total turnover rate for the government's white-collar workers.

TABLE 1. AVERAGE ANNUAL TURNOVER RATES FOR THE FULL-TIME, PERMANENT FEDERAL WORKFORCE, BY PAY SCHEDULE, AGENCY, AND TYPE OF TURNOVER, 1984

Pay Schedule and Agency	Quits	Transfers	Retirements	Other <u>a/</u>	Total
All Workers	4.3	1.6	2.6	3.0	11.5
Defense	3.8	1.5	3.0	3.1	11.4
Nondefense	4.9	1.7	2.3	2.8	11.7

General Schedule Workers <u>b/</u>	4.9	1.9	2.4	3.1	12.3
Defense	4.6	2.0	2.7	3.5	12.8
Nondefense	5.0	1.9	2.1	2.8	11.8

Wage System Workers	2.5	0.5	3.6	2.3	8.9
Defense	2.3	0.5	3.5	2.2	8.5
Nondefense	3.0	0.7	3.9	2.9	10.5

SOURCE: Congressional Budget Office, from data provided by the Office of Personnel Management.

- a. Includes extended leave without pay, layoffs, deaths, and dismissals. The most common reason for separation in this category is extended leave without pay.
- b. Includes white-collar workers paid according to the General Schedule and similar pay plans.

MEASURING EMPLOYEE TURNOVER

Turnover, for purposes of this analysis, includes quits (resignations), transfers between agencies, retirements, and other separations such as layoffs, deaths, furloughs, and extended leave without pay.

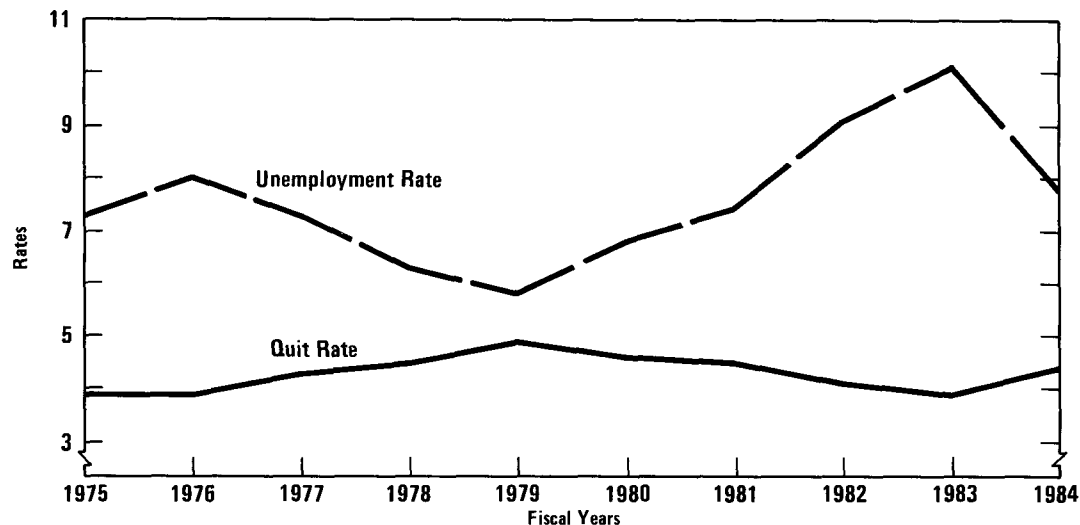
Turnover can be measured in a variety of ways. The most widely used measure, and the one used here, expresses employee separations over a specified period as a percentage of the average employment for the period. Rates may be developed for different types of separations, the quit rate being the most often cited.

In its analyses, the Congressional Budget Office employs one of three rates, depending on the nature of the comparison and the availability of data: one rate covers all types of separations, one covers quits alone, and one covers quits and transfers. In addition, the federal rates used in Chapter II's comparisons with the private-sector rates have been adjusted, where necessary, to make them more comparable with the private data used. The type of rate used in each of the report's analyses is indicated in the text.

The Congressional Budget Office obtained the federal rates used for this study from the Office of Personnel Management's Central Personnel Data File (CPDF). The CPDF contains data on executive branch agencies only, excluding the U.S. Postal Service, the Tennessee Valley Authority, and several other small agencies. Turnover reports from CPDF reflect two of the various white-collar workforce totals kept by the government. One covers workers on the General Schedule and workers who are paid similarly but not officially covered by it. Another adds to this group those workers on pay plans equivalent to but separate from the General Schedule, such as those of the Foreign Service and the Veterans Administration's Department of Medicine and Surgery. Based on reports from CPDF, full-time permanent employees on the General Schedule and similar pay plans totaled 1.3 million in 1984; full-time permanent employees on the General Schedule and equivalent pay plans totaled 1.4 million. Full-time permanent employees covered by the Wage System--or blue-collar workers--totalled 0.4 million for the same period.

Figure 1.

Changes in Quit Rates for Full-Time, Permanent Federal Employees and in U.S. Unemployment Rates, 1975-1984



SOURCE: Congressional Budget Office, from data provided by Office of Personnel Management and the U.S. Department of Labor, Bureau of Labor Statistics. Federal data covers the Wage System workforce and workers of the General Schedule and similar pay plans.

Many factors account for changes in turnover rates. Not surprisingly, federal workers, like their private-sector counterparts, are more likely to make a change in job status when things are going well in the economy than when they are going poorly. The influence of the state of the economy, as indexed by national unemployment rates, on turnover is shown in Figure 1.

Who Leaves Federal Jobs?

The quality of employees who leave a job can have as great an effect on managers and management practices as the number of workers who leave. Highly skilled, experienced workers, for example, can be both difficult and expensive to replace. An employer with a turnover rate that is low compared with others in the same business--a condition generally considered favorable--may still have a problem if many of the workers who leave are among the best and most experienced. Yet little analysis has been done on the important relationship between turnover and performance.

This section examines some important characteristics of federal workers who quit their jobs or transfer from one agency to another. Analysis focuses on quits and transfers, together referred to as voluntary separations, as they represent the types of separations of prime concern to

managers and more subject to their control. (The previous section covered rates that included all types of separations.)

Occupation, Length of Service, and Age. Federal white-collar workers are grouped into five broad occupational categories: professional, administrative, technical, clerical, and other (these categories are described in the box, below). Among the major occupational categories, voluntary separations are much higher for clerical workers and employees with fewer years of federal service (see Table 2).

WHITE-COLLAR OCCUPATIONAL CATEGORIES

The government classifies federal white-collar jobs according to five occupational groups--professional, administrative, technical, clerical, and other. Occupations are assigned to one of these categories according to the nature of the work and the level of education required.

Professional. Involves the exercise of judgment and responsibility and the application of a specialized field of knowledge, generally acquired through education or training. Job titles in this group include chemist, architect, patent attorney, accountant, nurse, and economist.

Administrative. Covers work involving management and administration. These positions involve application of skills obtained through general as opposed to specialized education. Examples include facility manager, public affairs coordinator, procurement officer, labor relations specialist, and inventory manager.

Technical. Involves nonroutine tasks that support work in the professional and administrative fields. Technical job titles include radio operator, forester, nursing assistant, and dental assistant.

Clerical. Involves structured routine work in support of office, business, or fiscal operations. Job titles include data transcriber, secretary, correspondence clerk, and payroll clerk.

Other. Includes those job titles, such as guard, not classified elsewhere.

In 1984, the voluntary separation rate for the government's clerical workers, who represent 24 percent of the white-collar workforce with permanent appointments, was almost twice the rate for all white-collar workers. Rates for the individual occupations that make up the clerical workforce were almost all high, compared with occupations in the other major categories. Rates for occupations such as clerk-typist and keypunch operator, which account for about one-third of the clerical workforce, stood at 15 percent or higher. By contrast, rates for the government's professional, administrative, and technical occupations--averaging 5.1, 3.8, and 5.5 percent, respectively, in 1984--were almost all low. Only a few nonclerical

TABLE 2. AVERAGE ANNUAL RATES FOR QUILTS AND TRANSFERS FOR THE FULL-TIME, PERMANENT, GENERAL SCHEDULE WORKFORCE, BY OCCUPATION AND YEARS OF SERVICE, 1984

Occupation	Percent of GS Workforce	Years of Service					All Workers
		5 and Under	6-15	16-20	21-25	25 and Over	
Professional	22	11.2	4.7	1.8	1.0	.5	5.1
Administrative	29	8.7	4.9	2.5	1.6	.7	3.8
Technical	22	13.1	5.9	2.5	1.4	.6	5.5
Clerical	24	19.5	10.3	4.4	3.0	1.1	12.4
Other	3	30.1	10.5	5.2	3.3	1.6	15.1
All Occupations	100	15.1	6.6	2.7	1.6	.7	6.8

SOURCE: Congressional Budget Office, from data provided by the Office of Personnel Management.

NOTE: Includes workers on the General Schedule and on schedules equivalent to but separate from it.

occupations, most notably nurse (a professional occupation), came close to the higher rates exhibited by clerical workers.

All the factors contributing to the observed differences in turnover for the government's major occupational groups are not known. Several factors may, however, help explain the high rate for clerical workers. Clerical skills are less job-specific than those of many nonclerical jobs and therefore are more transferable. Most clerical workers, moreover, are women and therefore are more likely to leave work to raise families. In October 1983, women accounted for about half of the full-time, white-collar federal workforce but represented 86 percent of the clerical workforce. Also, career growth for many clerical workers in the federal system peaks at a relatively low grade, thus limiting incentives to stay either in that type of work or in public service.

Voluntary separations are also more common among workers with fewer years of service and younger workers. In 1984, for example, GS workers with five or fewer years of service had a voluntary separation rate more than twice the average for all workers and more than 20 times the rate of workers with more than 25 years of service (see Table 2).

The relationship between length of service and separations holds regardless of the occupation considered. It is well documented in the literature, and not peculiar to government.^{2/} The relationship reflects in part the search for fulfilling work that occurs early in many careers and the fact that skills may not yet have become so specialized as to limit other opportunities.^{3/} Workers with less seniority are also generally younger and thus may enjoy greater job mobility given the absence of family, home ownership, and other responsibilities. With advancing years, such responsibilities increase, as does the value placed on a compensation package--like that of the federal government--that rewards service and age.^{4/} As shown below, federal turnover rates decline as the age of the worker increases. The 1984 rates for quits and transfers cover workers on the General Schedule and on equivalent pay schedules.

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2. See, for example, William H. Mobley, *Employee Turnover: Causes, Consequences, and Control* (Reading, Massachusetts: Addison-Wesley Publishing Company, 1982), p. 97.
 3. Mobley (*Employee Turnover*, p. 97) makes reference to two studies that consider the search among young workers for jobs consistent with their expectations.
 4. For a brief description of how the current federal retirement system encourages long service, see Chapter II, page 20.

<u>Age</u>	<u>1984 Rates for Quits and Transfers</u>
20 and Under	27.1
21 - 35	12.0
36 - 50	5.1
51 and Over	2.3
All Ages	6.8

Performance. Given that a certain amount of turnover always occurs, an organization would do better to lose its poor workers and keep its superior workers. Little study has been devoted to the abilities of federal employees who leave their jobs, however, in part because data are difficult to obtain. As a preliminary assessment, CBO examined the performance ratings of full-time federal employees on the merit-pay plan who quit or transferred in 1984. Under this pay system, raises for about 120,000 federal managers and supervisors in GS grades 13 through 15 are tied to performance. 5/

The CBO analysis indicates a healthy pattern in that the government currently does not experience disproportionate turnover among its highly rated managers and supervisors. Their voluntary separation rate stood at 1.8 in 1984, about 25 percent below the average for all merit-pay employees (see Table 3). The voluntary separation rate for employees with below-average ratings, by contrast, stood at 2.9 or about 20 percent higher than the average for all merit-pay workers--suggesting that turnover may further the management objective of separating out unsatisfactory performers. 6/ Major changes in federal pay and compensation packages, of course, could alter this picture.

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5. CBO collapsed the five ratings used in the merit-pay system to three. "Outstanding" and "exceeds fully successful" became *Above Average*; "fully successful" became *Average*; and "minimally satisfactory" and "unsatisfactory" became *Below Average*. For the merit pay employees receiving performance ratings in 1984, 67 percent were rated *Above Average*; 32 percent were rated *Average*; and 1 percent were rated *Below Average*.
 6. The CBO analysis cross-tabulated performance and length of service. In general, the length of service of employees with different performance ratings did not appear to account for the results described.

TABLE 3. AVERAGE ANNUAL RATES FOR QUILTS AND TRANSFERS FOR FULL-TIME EMPLOYEES RECEIVING MERIT PAY, BY AGENCY AND PERFORMANCE RATING, 1984

Agency	Performance Rating			All Merit-Pay Employees
	Below Average	Average	Above Average	
Defense Department	2.2	1.5	1.5	2.1
Nondefense Agencies	4.9	1.9	2.0	2.6
All Agencies	2.9	1.7	1.8	2.4

SOURCE: Congressional Budget Office, from data provided by the Office of Personnel Management.

A complete understanding of the quality of workers leaving their jobs can be achieved only through additional research and data collection. The group examined by CBO--managers and supervisors under the merit-pay plan--represents only about 8 percent of the white-collar workforce. (Comparable data are not reported for the rest of the workforce.) Further analysis could focus on individual agencies and occupations to identify problems that are masked when analysts focus on more aggregated groups. A recent study by the Department of Defense (DoD), for example, finds preliminary evidence of a problem with the loss of superior engineers and scientists.^{7/} Using Scholastic Aptitude Test (SAT) scores as a proxy for quality, the DoD found a noticeably higher quit rate among scientists and engineers hired during the period 1970-1979 who had scored above 650 in math.^{8/} Their quit rate was approximately 5.1, compared with lower rates of about 4.1 for those scoring between 501 and 650, and about 3.4 for those

7. Karen Cleary Alderman, "Using Labor Market Indicators as a Gauge for Setting Pay for Federal Employees: Review of the Issues" (unpublished Department of Defense report, 1984).

8. The SAT score of 650 could be considered a high score. According to data from the College Board, only 8 percent of test takers scored above 650 in math in 1985.